WHAT IS CLAIMED IS:

1. An automotive alternator voltage control apparatus comprising:

an annular slinger;

a brush holder that is disposed so as to extend radially from an outer peripheral wall surface of said slinger and that is formed such that a brush insertion aperture is open at an inner peripheral wall surface of said slinger;

positive electrode and negative electrode brushes that are inserted into said brush insertion aperture so as to line up in an axial direction of said slinger and be movable in a radial direction of said slinger;

a voltage regulator having an integrated circuit (IC) on which a circuit is formed that controls an automotive alternator output voltage;

a surge absorber that absorbs surges arising due to output voltage control by said voltage regulator; and

a connector for input and output from and to an external device,

characterized in that:

said slinger, said brush holder, and said connector are constituted by a resin body that is formed integrally using an insulating resin; and

said voltage regulator, said surge absorber, and said connector are disposed radially outside said slinger alongside said brush holder on a first circumferential side of said brush holder.

2. The automotive alternator voltage control apparatus according to Claim 1, wherein:

a voltage regulator housing aperture and a surge absorber housing aperture are formed so as to line up in said radial direction on a portion of said resin body between said slinger and said connector; and

said voltage regulator and said surge absorber housed in said voltage regulator housing aperture and said surge absorber housing

aperture and said connector are disposed so as to line up in a single column in said radial direction.

3. The automotive alternator voltage control apparatus according to Claim 2, wherein:

said voltage regulator housing aperture and said surge absorber housing aperture are formed on said resin body so as to be open at said first axial end; and said voltage regulator and said surge absorber are housed in said voltage regulator housing aperture and said surge absorber housing aperture from said first axial end.

4. The automotive alternator voltage control apparatus according to Claim 3, wherein:

a plurality of insert conductors are insert molded into said resin body so as to be exposed at said first axial end and constitute a voltage regulator connecting terminal and a surge absorber connecting terminal; and said voltage regulator and said surge absorber are respectively connected to said voltage regulator connecting terminal and said surge absorber connecting terminal at said first axial end.

5. The automotive alternator voltage control apparatus according to Claim 4, wherein:

a resin tub is disposed on said resin body so as to surround said voltage regulator housing aperture, said surge absorber housing aperture, said voltage regulator connecting terminal, and said surge absorber connecting terminal; and said resin tub is filled with an insulating resin so as to embed a connection portion between said voltage regulator and said voltage regulator connecting terminal and a connection portion between said surge absorber and said surge absorber connecting terminal.

6. The automotive alternator voltage control apparatus according to Claim 1, wherein:

a voltage regulator housing aperture is formed in a portion of said resin body between said slinger and said connector, said voltage regulator housed in said voltage regulator housing aperture and said connector are disposed so as to line up in a single column in a radial direction; and said surge absorber is disposed so as to overlap at said first axial end with said voltage regulator and said connector that are disposed in a single column.

7. The automotive alternator voltage control apparatus according to Claim 6, wherein:

said voltage regulator housing aperture is formed on said resin body so as to be open at said first axial end; a plurality of insert conductors are insert molded into said resin body so as to be exposed at said first axial end and constitute a voltage regulator connecting terminal and a surge absorber connecting terminal; and said voltage regulator and said surge absorber are respectively connected to said voltage regulator connecting terminal and said surge absorber connecting terminal at said first axial end.

8. The automotive alternator voltage control apparatus according to Claim 7, wherein:

a cover is disposed on said resin body so as to envelop said voltage regulator housing aperture, said voltage regulator connecting terminal, and said surge absorber connecting terminal; a resin injection penetrating aperture is disposed through said resin body so as to communicate between a second axial end and an internal portion of said cover; and said cover is filled with an insulating resin through said resin injection penetrating

aperture so as to embed a connection portion between said voltage regulator and said voltage regulator connecting terminal and a connection portion between said surge absorber and said surge absorber connecting terminal.

9. The automotive alternator voltage control apparatus according to any one of Claims 1 through 8, wherein:

said IC is constituted by a molded IC in which an IC chip is sealed in a resin.

10. The automotive alternator voltage control apparatus according to any one of Claims 1 through 8, wherein:

said IC is constituted by a hybrid IC in which an IC chip is mounted to an insulating circuit board.

11. The automotive alternator voltage control apparatus according to Claim 6, wherein:

said voltage regulator housing aperture is formed on said resin body so as to be open at said first axial end;

said IC is constituted by a single-chip IC in which an IC chip is joined directly to an exposed surface of a heat sink that is disposed inside said voltage regulator housing aperture;

a plurality of insert conductors are insert molded into said resin body so as to be exposed around an outer periphery of said voltage regulator housing aperture and constitute a voltage regulator connecting terminal and a surge absorber connecting terminal;

said IC chip is connected to said voltage regulator connecting terminal by means of a bonding wire;

said surge absorber is connected to said surge absorber connecting

terminal; and

an insulating resin gel material is disposed so as to embed said IC chip, said voltage regulator connecting terminal, said surge absorber connecting terminal, said bonding wire, a connection portion between said bonding wire and said voltage regulator connecting terminal, a connection portion between said bonding wire and said IC chip, and a connection portion between said surge absorber and said surge absorber connecting terminal.